



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR DATES.

COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.nento.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/776,981	02/05/2001	Ming-Hau Lee	MORPH1140	2432
7590 08/11/2004		EXAMINER		
Terrance A. M		CHANG, ERIC		
Gray Cary Ward Suite 1700	e & Freidenrich	ART UNIT	PAPER NUMBER	
401 B Street			2116	
San Diego, CA 92101-4297			DATE MAILED: 08/11/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.



		Application No.	Applicant(s)	ish.
	•	09/776,981	LEE ET AL.	
•	Office Action Summary	Examiner	Art Unit	
		Eric Chang	2116	
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with th	e correspondence addr	'ess
THE - Exte after - If the - If NO - Failt Any	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period we are to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be writhin the statutory minimum of thirty (30) will apply and will expire SIX (6) MONTHS fr cause the application to become ABANDO	e timely filed days will be considered timely. om the mailing date of this com NED (35 U.S.C.§ 133).	munication.
Status				
1)⊠	Responsive to communication(s) filed on 17 M	ay 2004.		
2a)⊠	<u> </u>	action is non-final.		
3)□	Since this application is in condition for allowar	nce except for formal matters,	prosecution as to the n	nerits is
	closed in accordance with the practice under E	ix parte Quayle, 1935 C.D. 11,	453 O.G. 213.	
Disposit	ion of Claims			
5)□ 6)⊠ 7)□	Claim(s) <u>1-15</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) <u>1-15</u> is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or	vn from consideration.		
Applicati	ion Papers			
•	The specification is objected to by the Examine			
10)	The drawing(s) filed on is/are: a) ☐ acce			
	Applicant may not request that any objection to the o	- 1, -	* *	4 404(4)
11)	Replacement drawing sheet(s) including the correcti The oath or declaration is objected to by the Ex-	• • • • • • • • • • • • • • • • • • • •	· ·	
•	ınder 35 U.S.C. § 119			
12)[a)[Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priorical application from the International Bureau See the attached detailed Office action for a list of	s have been received. s have been received in Applic ity documents have been rece ı (PCT Rule 17.2(a)).	ation No ived in this National St	age
Attachmen	t(s)			
1) 🛛 Notic	e of References Cited (PTO-892)	4) Interview Summa		
2) 🔲 Notic 3) 🔲 Inforr	e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	Paper No(s)/Mail 5) Notice of Informa 6) Other:	Date al Patent Application (PTO-1	52)

Application/Control Number: 09/776,981 Page 2

Art Unit: 2116

DETAILED ACTION

1. Claims 1-15 are pending.

Response to Arguments

- 2. Applicant's arguments filed on May 17, 2004 have been fully considered but they are not persuasive.
- 3. In the remarks, applicants argued in substance that in the rejection for Claim 5, Albonesi does not teach or suggest masking an MxN of processor cells to enable a subset of cells. But Albonesi teaches enabling a subset of cells based on a data structure for selecting cells to enable and disable [col. 8, lines 1-18], thereby creating an effective mask for saving power by deactivating unneeded processor elements, substantially as claimed. Albonesi teaches that individual cells may be addressed by the control structures. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the process for selecting cells in the processor in an MxN processor array architecture) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).
- 4. In the remarks, applicants argued in substance that Morton and Albonesi do not separately or in combination teach or suggest gating a row mask signal and column mask signal with a clock signal of each cell. But Morton teaches a vertical and horizontal mask for

. .

. Application/Control Number: 09/776,981

Art Unit: 2116

determining whether a cell in a processor array should be activated [col. 3, lines 31-51]. Furthermore, Morton teaches that a control register determines whether a particular cell should be activated [col. 2, lines 48-55], and that the control register receives both the "Processor Active" signal created by the intersection of the vertical and horizontal mask signals and a clock signal [FIG. 4, elements 40, "Processor Active", and "CLK"] to determine said activation. In addition, Morton teaches the control register is gated to the clock, thereby activating the processor cell in accordance to the changing of the clock state [col. 12, lines 30-34], substantially as claimed.

5. In the remarks, applicants argued in substance that one of ordinary skill in the art would not be motivated to combine the teachings of Morton and Albonesi. But Morton teaches the process by which the activation of processor cells in an MxN processor array would be controlled. Albonesi teaches dynamically changing the activation of processor elements based on an instruction to be executed. Therefore, they are both directed towards the problem of activating and deactivating processor elements in a processor in order to disable elements that were not needed for processing. By using the per-instruction activation control taught by Albonesi, Morton teaches how such control may be implemented in an MxN processor array, in order to conserve power, substantially as claimed.

Conclusion

6. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2116

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Chang whose telephone number is (703) 305-4612. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on (703) 308-1159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

" Application/Control Number: 09/776,981

Art Unit: 2116

August 2, 2004

A. ELAMIN
PRIMARY EXAMINER

Page 5